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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,880	11/20/2000	Markku Lipponen	460-009934-US	1077

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EXAMINER

GANTT, ALAN T

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,880

Applicant(s)

LIPPONEN ET AL.

Examiner

Alan T. Gantt

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-15 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 6-9, and 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim.

Regarding claim 1, Kim discloses an electronic device, which comprises at least a keyboard (page 2, lines 3-14), which keyboard comprises at least one key for controlling the functions of the electronic device (page 5, lines 7-35), which keyboard is arranged as a keyboard plate, characterized in that said keyboard also comprises a touch sensitive element (page 5, lines 15-20), that said keyboard plate is arranged as fixed over the touch sensitive element so that the depression of a key is arranged to be transmitted to the touch sensitive element essentially at the point of the key (page 2, lines 15-18 and Figure 2),

Art Unit: 2684

and that the electronic device comprises means for determining the point of depression in the touch sensitive element, whereby it is arranged to be determined on the basis of the determined point of depression which key has been depressed (page 5, line 36 to page 6, line 15 and Figure 4).

Regarding claim 9, Kim discloses a method for recognizing the depression of a key of the keyboard of an electronic device, which keyboard is used for controlling the functions of the electronic device (page 5, lines 7-35), in which method the keys are formed into a keyboard plate, characterized in that the keyboard is formed of a touch sensitive element, over which the keyboard plate is arranged as fixed so that the depression of a key is transmitted to the touch sensitive element essentially at the point of a key (page 2, lines 15-18 and Figure 2 and page 5, lines 15-20), and that the point of depression in the touch sensitive element is determined in the electronic device, whereby on the basis of the determined point of depression it is determined which key has been depressed (page 5, line 36 to page 6, line 15 and Figure 4).

Regarding claim 15, A keyboard of an electronic device, which comprises at least one key for controlling the functions of the electronic device (page 5, lines 7-35), which keyboard is arranged as a keyboard plate, characterized in that said keyboard also comprises a touch sensitive element, and that said keyboard plate is arranged as fixed over the touch sensitive element so that the depression of a key is arranged to be transmitted to the touch sensitive element essentially at the point of the key (page 2, lines

Art Unit: 2684

15-18 and Figure 2 and page 5, lines 15-20), whereby it is arranged to be determined on the basis of the determined point of depression which key has been depressed (page 5, line 36 to page 6, line 15 and Figure 4).

Regarding claim 2, Kim discloses an electronic device (1) according to claim 1, characterized in that the keyboard plate is a keyboard mat (page 5, lines 13-20 where the second keypad has a thin flexible membrane-same as keypad mat).

Regarding claims 6 and 12, Kim shows an electronic device which comprises at least one body housing element, characterized in that it comprises a keyboard element arranged as turning in relation to the body housing element, in which keyboard element the keyboard is disposed (Figure 2 and page 4, lines 10-30).

Regarding claims 7 and 13, Kim shows an electronic device characterized in that the keyboard element, which has a first and a second extreme position, is arranged as turning between the first and the second extreme position, and in the first extreme position the keyboard element is preferably placed over the body housing element so that the keyboard element functions as protection for the display and the keyboard is at least partly invisible, and in the second extreme position the keyboard element is preferably so that the keyboard and the display are essentially entirely exposed (Figures 1 and 2 in relation to each other, the first extreme position is closed as in Figure 1 and the second is open and turning between closed and open exposes the display).

Regarding claims 8 and 14, Kim shows an electronic device according to claim 7, characterized in that another display and another keyboard are arranged in it for activating one or more functions of the electronic device preferably when the keyboard element is in said first extreme position (Figure 2 and page 4, line 29 to page 5, line 6 - Kim discloses two keypads and two displays).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, in view of Eriksson.

Regarding claims 4 and 10, Kim discloses an electronic device, which comprises at least a keyboard (page 2, lines 3-14), which keyboard comprises at least one key for controlling the functions of the electronic device (page 5, lines 7-35), which keyboard is arranged as a keyboard plate, characterized in that said keyboard also comprises a touch sensitive element. However, Kim does not include a sliding keyboard element.

Eriksson discloses telephone that is small when not in use and appropriately big when being used. Eriksson, thus, teaches an electronic device according to claim 1,

Art Unit: 2684

characterized in that it comprises a sliding keyboard element, in which the keyboard is disposed (page 4, line 35 to page 5, line 10).

Kim and Eriksson are combinable since they share a common endeavor, namely, mobile telephones with adjustable keypads. At the time of the applicant's invention it would have been obvious to modify Kim to include means for allowing one of the keypads to slide to thereby increase the length of the mobile telephone as done by Eriksson to allow for a more diminutive mobile telephone.

(Figures 1 and 2 and page 3, line 18 to page 4, line 7), is arranged as sliding between the first and the second extreme position, and in the first extreme position the keyboard element is preferably under the body housing element so that the keyboard is at least partly invisible (Figure 2), and in the second extreme position the keyboard element is preferably so that the keyboard is essentially entirely exposed (Figure 1).

Allowable Subject Matter

5. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 3, the use of a bubble membrane for the makeup of a keyboard plate was neither found, suggested, nor made evident by the prior art.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wicks discloses a wireless telephone with sliding keyboard.

Miyazawa discloses a touch-panel input type electronic device.

Hayes, Jr. et al. discloses a radiotelephone having contact-sensitive user interfaces and methods of operating same.

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (703) 305-0077. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (703) 872-9314.

Any inquiry of a general nature or relating to this application should be directed to the group receptionist at telephone number (703) 305-4700.

Alan T. Gantt
Alan T. Gantt

Michael

September 15, 2003